



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0873; Project Identifier MCAI-2021-00336-R; Amendment 39-21873; AD 2021-26-14]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2018-11-01, which applied to certain Airbus Helicopters Model AS332L2 and EC225LP helicopters. AD 2018-11-01 required installing a cut-out for the left-hand (LH) and right-hand (RH) rail support junction profiles and repetitively inspecting splices, frame 5295, and related equipment for a crack. Since the FAA issued AD 2018-11-01, the manufacturer has developed a modification for in-service helicopters for replacing aluminum splices with steel splices on frame 5295. This AD retains the requirements of AD 2018-11-01 and requires a modification for replacing aluminum splices with steel splices on frame 5295 if cracking is found. This AD also provides terminating action for the repetitive inspections. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region,

10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. Service information that is incorporated by reference is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0873.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0873; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Union Aviation Safety Agency (EASA) AD, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2018-11-01, Amendment 39-19289 (83 FR 23778, May 23, 2018), (AD 2018-11-01). AD 2018-11-01 applied to Airbus Helicopters Model AS332L2 and EC225LP helicopters with an extended aluminum splice installed on frame 5295, except helicopters with steel splice kit part number 332A08-2649-3072 installed. AD 2018-11-01 required installing a cut-out for the LH and RH rail support junction profiles and repetitively inspecting splices, frame 5295, and related equipment for a crack. AD 2018-11-01 was prompted by reports of cracks on frame 5295 and on splices installed to prevent those cracks. The FAA issued AD 2018-11-01 to address a crack in frame 5295,

which if not detected and corrected, could lead to loss of structural integrity of the helicopter frame and subsequent loss of control of the helicopter.

The NPRM published in the *Federal Register* on October 22, 2021 (86 FR 58600). In the NPRM, the FAA proposed to retain the requirements of AD 2018-11-01 and require a modification for replacing aluminum splices with steel splices on frame 5295 if cracking is found. The NPRM was prompted by EASA AD 2021-0075, dated March 16, 2021 (EASA AD 2021-0075), which supersedes EASA Emergency AD 2014-0098-E, dated April 25, 2014 (EASA Emergency AD 2014-0098-E), issued by EASA, which is the Technical Agent for the Member States of the European Union.

EASA advises that since EASA Emergency AD 2014-0098-E was issued, Airbus Helicopters developed MOD 0728463, available for helicopters in service through the applicable modification service bulletin, providing instructions to replace aluminum splices with steel splices on frame 5295. Airbus Helicopters also issued the applicable inspection alert service bulletins, as defined in EASA AD 2021-0075. Accordingly, EASA AD 2021-0075 retains the requirements of EASA Emergency AD 2014-0098-E, which is superseded, and requires a modification, replacing aluminum splices with steel splices on helicopters on which any cracked aluminum splice has been detected. EASA AD 2021-0075 also advises that the modification is terminating action for the repetitive inspections.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on

these helicopters. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed the following Airbus Helicopters service information.

- Alert Service Bulletins Nos. AS332-05.00.97, Revision 1; and EC225-05A038, Revision 1; both dated February 9, 2021; which specify procedures for, among other actions, installing a cut-out for the LH and RH rail support junction profiles and inspecting splices, frame 5295, and related equipment for a crack. These documents are distinct since they apply to different helicopter models.
- Service Bulletins Nos. AS332-53.01.97, Revision 0; and EC225-53-061, Revision 0; both dated February 9, 2021; which specify procedures for modifying the helicopter by replacing the aluminum LH and RH splices with steel splices under the plates and the brackets of the main gear box (MGB) bars. The modification includes taking reference readings of the brackets of the MGB bars, removing the MGB brackets and plates, removing the aluminum splices and inspecting the joggling areas for scratches or other damage, inspecting frame 5295 for cracking (including a dye penetrant inspection if the inspection results are not conclusive), identifying the current measurements (values) of the rivet and attachment plate holes for installation of the steel splice (including determining the values of the rivet holes and attachment plate holes on frame 5295 with a calibrated pad and determining the elongations of the holes and the lengths of the straps), modifying the door hinge rail brackets on the LH and RH sides, and installing the steel splices. These documents are distinct since they apply to different helicopter models.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA reviewed Eurocopter Helicopters (now Airbus Helicopters) Service Bulletin No. 53-003, Revision 4, for Model EC225LP helicopters and Service Bulletin No. 53.01.52, Revision 5, for Model AS332L2 helicopters, both dated July 23, 2010. The

service bulletins specify procedures to reinforce frame 5295 by installing a new titanium plate underneath the fitting and a new widened aluminum splice below the upper corner of the door.

The FAA also reviewed Airbus Helicopters Service Bulletin No. 05-019, Revision 4, dated September 22, 2014, for Model EC225 LP helicopters. This service information specifies procedures for cutting out the junction profiles.

The FAA also reviewed Airbus Helicopters Alert Service Bulletins Nos. AS332-05.00.97, Revision 0; and EC225-05A038, Revision 0; both dated April 15, 2014; which specify procedures for, among other actions, installing a cut-out for the LH and RH rail support junction profiles and inspecting splices, frame 5295, and related equipment for a crack.

Redesignation of AD 2018-11-01 Paragraph Identifier

Since AD 2018-11-01 was issued, the AD format has been revised, and certain paragraphs have been rearranged. As a result, the corresponding paragraph identifiers have been redesignated in this AD, as listed in the following table:

Revised paragraph identifier	
Requirement in AD 2018-11-01	Corresponding requirement in this AD
paragraph (e)	paragraph (g)
paragraph (f)	paragraph (j)(1)

Differences Between this AD and the EASA AD 2021-0075

EASA AD 2021-0075 requires contacting Airbus Helicopters for approved repair instructions if any crack is found during an inspection. This AD would not require that action.

Costs of Compliance

The FAA estimates that this AD would affect 38 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained installation of cut-outs on frame 5295 from AD 2018-11-01	40 work-hours X \$85 per hour = \$3,400	\$5,000	\$8,400	\$319,200
Retained inspection of frame 5295 from AD 2018-11-01	2 work-hours X \$85 per hour = \$170, per inspection cycle.	\$0	\$170, per inspection cycle.	\$6,460, per inspection cycle.

The FAA estimates the following costs to do any necessary repairs that would be required based on the results of the inspection. The agency has no way of determining the number of aircraft that might need these repairs:

Estimated costs of on-condition actions

Action	Labor cost	Parts cost	Cost per product
Repair	40 work-hours X \$85 per hour = \$3,400	\$5,000	\$8,400
New modification (replacement of aluminum splices with steel splices)	830 work-hours X \$85 per hour = \$70,550	\$35,000	\$105,550

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive 2018-11-01, Amendment 39-19289 (83 FR 23778, May 23, 2018); and

- b. Adding the following new airworthiness directive:

2021-26-14 Airbus Helicopters: Amendment 39-21873; Docket No. FAA-2021-0873; Project Identifier MCAI-2021-00336-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2018-11-01, Amendment 39-19289 (83 FR 23778, May 23, 2018) (AD 2018-11-01).

(c) Applicability

This AD applies to Airbus Helicopters Model AS332L2 and Model EC225LP helicopters, certificated in any category, as specified in paragraphs (c)(1) and (2) of this AD.

(1) Model AS332L2 helicopters equipped with extended aluminum splices on frame 5295 installed in accordance with Airbus Helicopters (AH) Modification (MOD) 0726517, Eurocopter (EC) AS332 Service Bulletin (SB) 53.01.52, or AH repair design 332-53-507-06, 332-53-21-07, or 332-53-82-06; except helicopters embodying AH MOD 0728463, AH SB AS 332-53.01.97, or repair design 332-53-409-12, 332-53-1284-13, 332-53-1079-16, or 332-53-1358-16.

Note 1 to paragraph (c)(1): As referenced in paragraphs (c)(1) and (2) of this AD, helicopters with AH MOD 0728463 installed have replaced the aluminum splices with steel splices.

(2) Model EC225LP helicopters equipped with extended aluminum splices on frame 5295 installed in accordance with AH MOD 0726517, or EC EC225 SB 53-003 (pre AH MOD 0726493 and post AH MOD 0726517), except helicopters embodying AH MOD 0728463, or SB EC225-53-061.

Note 2 to paragraph (c)(2): Helicopters with AH MOD 0726493 have installed steel splice kit part number 332A08-2649-3072.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 5300, Fuselage Structure.

(e) Unsafe Condition

This AD was prompted by reports of cracks on frame 5295 and on aluminum splices installed to prevent those cracks. The FAA is issuing this AD to address cracking on frame 5295 and on the inner skins. The unsafe condition, if not addressed, could result in loss of structural integrity of the helicopter frame and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Installation and Inspections with New Service Information and Corrective Actions (Modification)

This paragraph retains the requirements of paragraph (e) of AD 2018-11-01, with new service information and corrective actions (modification).

(1) Before a splice reaches 1,700 hours time-in-service (TIS), within 50 hours TIS, or before the helicopter reaches 11,950 hours TIS, whichever occurs latest, do the following.

(i) Install the rail support cut-out and identify the left-hand (LH) and right-hand (RH) junction profile, in accordance with the Accomplishment Instructions, paragraph 3.B.2., of Airbus Helicopters Alert Service Bulletin (ASB) No. EC225-05A038, Revision 1, dated February 9, 2021 (Airbus Helicopters ASB No. EC225-05A038, Revision 1); or Airbus Helicopters ASB No. AS332-05.00.97, Revision 1, dated February 9, 2021 (Airbus Helicopters ASB No. AS332-05.00.97, Revision 1); whichever is applicable to your helicopter.

(ii) Inspect each splice for a crack in the area depicted as Area Y in Figure 3 of Airbus Helicopters ASB No. EC225-05A038, Revision 1; or Airbus Helicopters ASB No. AS332-05.00.97, Revision 1; whichever is applicable to your helicopter. If a crack exists, do the applicable action required by paragraph (g)(1)(ii)(A) or (B) of this AD.

(A) For any cracking found before the effective date of this AD: Repair or replace the splice before further flight.

(B) For any cracking found on or after the effective date of this AD: Before further flight, modify the helicopter in accordance with paragraph 3.B.2. of the Accomplishment Instructions of Airbus Helicopters Service Bulletin (SB) No. AS332-53.01.97, Revision 0, dated February 9, 2021 (Airbus Helicopters SB No. AS332-53.01.97, Revision 0); or Service Bulletin No. EC225-53-061, Revision 0, dated February 9, 2021 (Airbus Helicopters SB No. EC225-53-061, Revision 0); as applicable to your helicopter; except as specified in paragraph (h) of this AD.

(2) Thereafter at intervals not to exceed 110 hours TIS, inspect each splice for a crack in the area depicted as Area Y in Figure 3 of Airbus Helicopters ASB No. EC225-05A038, Revision 1; or Airbus Helicopters ASB No. AS332-05.00.97, Revision 1; whichever is applicable to your helicopter. If a crack exists, do the applicable actions required by paragraph (g)(2)(i) or (ii) of this AD. Accomplishing the modification specified in paragraph (g)(1)(ii)(B) and (g)(2)(ii) of this AD terminates the inspections required by this paragraph.

(i) For any cracking found before the effective date of this AD: Repair or replace the splice before further flight.

(ii) For any cracking found on or after the effective date of this AD: Before further flight, modify the helicopter in accordance with paragraph 3.B.2. of the Accomplishment Instructions of Airbus Helicopters SB No. AS332-53.01.97, Revision 0; or Airbus Helicopters SB No. EC 225-53-061, Revision 0; as applicable to your helicopter; except as specified in paragraph (h) of this AD.

(h) Service Information Exceptions

(1) Where Airbus Helicopters ASB No. EC225-05A038, Revision 1; Airbus Helicopters ASB No. AS332-05.00.97, Revision 1; Airbus Helicopters SB No. AS332-53.01.97, Revision 0; and Airbus Helicopters SB No. EC 225-53-061, Revision 0; specify to perform dye-penetrant inspections “if in doubt” or “if any doubt,” this AD requires performing a dye-penetrant inspection during inspections done on or after the effective date of this AD.

(2) Where Airbus Helicopters SB No. AS332-53.01.97, Revision 0; and Airbus Helicopters SB No. EC 225-53-061, Revision 0; specify discarding parts, this AD requires removing those parts from service.

(3) Where Airbus Helicopters SB No. AS332-53.01.97, Revision 0; and Airbus Helicopters SB No. EC 225-53-061, Revision 0, specify contacting Airbus Helicopter for corrective action or further procedures, this AD requires repair done in accordance with a method approved by the Manager, General Aviation & Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopters’ EASA Design Organization

Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(4) Airbus Helicopters SB No. AS332-53.01.97, Revision 0; and Airbus Helicopters SB No. EC 225-53-061, Revision 0, specify a visual check and dye penetrant inspection for cracks on the inside and outside of frame 5295. For this AD, if any cracking is found during any visual check or dye penetrant inspection on the inside and outside of frame 5295, before further flight, repair in accordance with a method approved by the Manager, General Aviation & Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopters' EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(i) Reporting Not Required

Although Airbus Helicopters SB No. AS332-53.01.97, Revision 0; and Airbus Helicopters SB No. EC 225-53-061, Revision 0; specify to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Credit for Previous Actions

(1) This paragraph provides credit for the installation of the rail support cut-out required by paragraph (g)(1)(i) of this AD, if that action was performed before June 27, 2018 (the effective date of AD 2018-11-01) using Airbus Helicopters MOD 0728090 or Airbus Helicopters SB No. 05-019, Revision 4, dated September 22, 2014.

(2) This paragraph provides credit for the actions required by paragraphs (g)(1) and (2) of this AD, if the actions were performed before the effective date of this AD using Airbus Helicopters ASB No. EC225-05A038, Revision 0, dated April 15, 2014; or Airbus Helicopters ASB No. AS332-05.00.97, Revision 0, dated April 15, 2014.

(k) Special Flight Permits

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the actions can be performed, provided no passengers are onboard.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (m)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(m) Related Information

(1) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (n)(3) and (4) of this AD.

(3) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2021-0075, dated March 16, 2021. You may view the EASA AD at <https://www.regulations.gov> in Docket No. FAA-2021-0873.

(n) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Airbus Helicopters Alert Service Bulletin No. AS332-05.00.97, Revision 1, dated February 9, 2021.

(ii) Airbus Helicopters Alert Service Bulletin No. EC225-05A038, Revision 1, dated February 9, 2021.

(iii) Airbus Helicopters Service Bulletin No. AS332-53.01.97, Revision 0, dated February 9, 2021.

(iv) Airbus Helicopters Service Bulletin No. EC225-53-061, Revision 0, dated February 9, 2021.

(3) For service information identified in this AD, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 10, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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